

***Botrychium pedunculosum* W.H. Wagner**

stalked moonwort

Ophioglossaceae (Adder's Tongue Family)

Status: State Sensitive, USFWS Species of Concern

Rank: G2G3S2S3

General Description: From Wagner and Wagner (1993): Trophophore stalk to 1 inch, to 11/10 times the length of the trophophore rachis. Blade dull green, ovate-oblong to deltate-oblong, 1-pinnate, to 1¼ by ¾ inch, leathery. Pinnae to 5 pairs, somewhat ascending, approximate to well separated. Distance between 1st and 2nd pinnae not or slightly more than between 2nd and 3rd pairs. Basal pinna pair approximately equal in size and cutting to adjacent pair, ovate-rhombic to spatulate, lobed to tip, margin entire to irregularly lobed, apex rounded to acute, venation pinnate. Sporophores 1-3 pinnate, 2 to 4 times the length of the trophophore.

Identification Tips: *Botrychium pedunculosum* is similar to *Botrychium pinnatum*, with which it may occur. *B. pedunculosum* can be distinguished from *B. pinnatum* by the well-developed stalk of the blade, the reddish-brown stripe running down the common stalk from the stalk of the blade, the dull gray-green to bluish color of the blade, and the presence of extra sporangia on the proximal pinnae.

Phenology: Identifiable June-August. Leaves appear in late spring and die in early fall.

Range: Scattered distribution from southern British Columbia to southern Saskatchewan, south to Washington and Oregon. In Washington, it is known from Ferry, Stevens, and Pend Oreille counties in the Okanogan Highlands physiographic province and King and Snohomish counties in the Western Cascades physiographic province.

Habitat: In Washington, the taxon has been found in moist or dry meadows, along perennial streams, and in coniferous forests. Elevations range from 1800 to 6300 feet.

Ecology: *Botrychium pedunculosum* often occurs with other species of moonworts, including *B. lanceolatum*, *B. lunaria*, *B. minganense*, and

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B. pinnatum.

State Status Comments: There are fewer than 20 known occurrences in Washington, most with fewer than 20 plants.

Inventory Needs: Additional inventory is needed throughout the state.

Threats and Management Concerns: Cattle grazing, road building and maintenance, and recreational activities, such as camping and ORV use, pose threats to the populations in Washington.

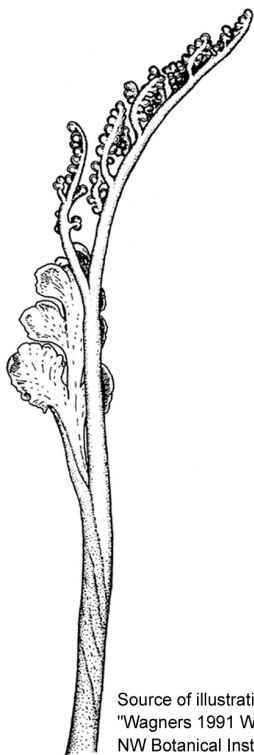
References:

Lellinger, D.B. 1985. *A Field Manual of the Ferns & Fern-Allies of the United States & Canada*. Smithsonian Institution Press, Washington, D.C.

Wagner, W.H. Jr., and F.S. Wagner. 1986. Three new species of moonworts (*Botrychium* subg. *Botrychium*) endemic in western North America. *Amer. Fern J.* 76(2): 33-47.

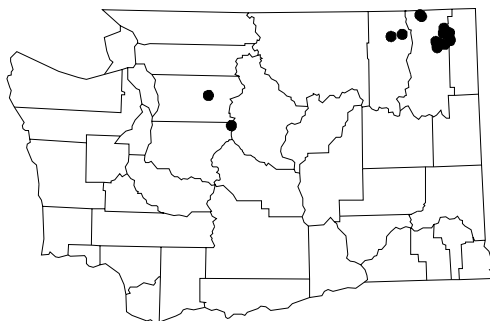
Wagner, W.H. Jr., and F.S. Wagner. 1993. *Flora of North America, Volume 2: Pteridophytes and Gymnosperms*. Treatment of the Ophioglossaceae Family. pp. 85-106.

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Source of illustration, W. H. Wagner
"Wagners 1991 Willamette Valley, Nature Calendar." 1990.
NW Botanical Institute, Eugene OR 97403

Known distribution of
Botrychium
pedunculatum
in Washington



- Current (1980+)
- Historic (older than 1980)

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